

REMARKS

Applicant respectfully requests re-consideration of the application in view of the amendments and the arguments presented below.

Summary of Office Action

Claims 1-25 are pending.

Claims 1-10 and 11 were rejected under 35 U.S.C. § 102 as being anticipated by Pessl, et al. "Proceedings of the 27th European Conference on Solid-State Circuits", ESSCIRC 2001, Sept. 18-20, 2001 ("Pessl").

Claims 12-25 were rejected under 35 U.S.C. § 103 as being unpatentable over Pessl in view of U.S. Patent No. 6,295,343 B1 of Hjartarson, et al. ("Hjartarson").

Summary of Amendments

No claim amendments have been made. The claims are presented in their entirety reflecting amendment status for the reasons stated below.

Comment on Previous Amendment

In the prior RCE submission, applicant inadvertently stated that the "claims are presented without amendment below" in the claims section of the amendment. The term "without" should have been "with". Applicant notes that the revision marks and claim status were otherwise properly indicated and that the amendments were documented in the "Summary of Amendments" section of the RCE filing. The claims are presented in their entirety in the present amendment for clarification.

Response to 35 U.S.C. § 102 rejections

Claims 1-10 and 11 were rejected as being anticipated by Pessl. Applicant respectfully submits claims 1-10 and 11 are not anticipated by Pessl.

With respect to claim 1-10, applicant respectfully submits that Pessl does not teach or disclose an integrated circuit coupling at least one of an upstream and a downstream voice path for carrying voice signals to a subscriber line, wherein the integrated circuit couples at least one of an upstream and a downstream data path for carrying data signals to the subscriber line, *wherein the integrated circuit provides a common downstream path for coupling any downstream voice and data paths to the subscriber line.*

The Examiner has stated in part

...wherein the integrated circuit (IVAX) provides a common downstream path for coupling any downstream voice and data paths (i.e., ADSL over POTS) to the subscriber line (Page 117, right column, lines 6-10)

(11/14/2006 Office Action, p. 3)

Applicant traverses the Examiner's characterization of IVAX. IVAX is not a single integrated circuit and the illustrated integrated circuit does not function as claimed by the Examiner. Applicant respectfully submits that the Examiner improperly mischaracterized IVAX as a single integrated circuit throughout his argument. Notably, Pessl's Figure 1 may describe operating modes of the IVAX, but does not suggest anything about how the functionality is distributed across all the integrated circuits in the chipset. Figure 2 illustrates one of the integrated circuits and the accompanying description clearly indicates that the driver circuitry is not part of that integrated circuit contrary to Examiner's representations (e.g., see 11/14/2006 Office Action, pages 3-4). Applicant respectfully directs the Examiner's attention to the distinction between the IVAX (i.e., a collection of integrated circuits) and one of the individual integrated circuits that is part of the IVAX chipset.

The Infineon IVAX chipset consists of *four* integrated circuits. Notably, the Analog Front End includes the codec but not the SLIC or linefeed driver. (Pessl, pg. 117, col. 2; Fig. 2). The blocks primarily illustrate DAC or ADC conversion and filters but no drivers or interface to the subscriber line. Clearly, given the number of signal lines illustrated about the AFE there are other components (not illustrated) for interfacing the AFE to the subscriber line. The upstream paths for

voice and data are clearly separate. Referring to Pessl Fig. 2, start at the distinct output signal lines identified as "Voice" and "Data" and move left. The upstream Voice and Data paths are clearly distinct and originate from two separate input pads at the left side of the diagram. Similarly, downstream Voice and Data paths originate from distinct signal lines on the right hand side which terminate as distinct signal lines on the left side.

The IVAX is four integrated circuits rather than one as indicated by the Examiner. Only one integrated circuit is illustrated in block diagram form. The block diagram of the illustrated integrated circuit (Pessl, Fig. 2) *does not teach or disclose a common path for either the upstream Voice and Data or the downstream Voice and Data.*

Thus with respect to claim 1, Pessl does not teach or disclose an integrated circuit coupling at least one of an upstream and a downstream voice path for carrying voice signals to a subscriber line, wherein the integrated circuit couples at least one of an upstream and a downstream data path for carrying data signals to the subscriber line, *wherein the integrated circuit provides a common downstream path for coupling any downstream voice and data paths to the subscriber line.*

In contrast, claim 1 includes the language:

1. A subscriber line transceiver apparatus, comprising:
an integrated circuit coupling at least one of an upstream and a downstream voice path for carrying voice signals to a subscriber line, wherein the integrated circuit couples at least one of an upstream and a downstream data path for carrying data signals to the subscriber line, *wherein the integrated circuit provides a common downstream path for coupling any downstream voice and data paths to the subscriber line*, wherein the voice signals are communicated within a first frequency range, wherein the data signals are communicated within a second frequency range, wherein the first and second frequency ranges are distinct.

(Claim 1)(*emphasis added*)

Similarly, with respect to claim 11 applicant respectfully submits that Pessl fails to teach or disclose a first receiver circuit for extracting upstream voice signals carried by a subscriber line, a second receiver circuit for extracting upstream data signals from the subscriber line, wherein the first and second

receiver circuits reside on a same integrated circuit die, *wherein the integrated circuit provides a common upstream path for receiving any upstream voice and data signals from the subscriber line.*

In contrast, claim 11 includes the language:

11. A subscriber line transceiver apparatus, comprising:
 - a first receiver circuit for extracting upstream voice signals carried by a subscriber line, wherein the first receiver circuit substantially eliminates any signals outside of a first frequency range associated with voiceband communications to provide the upstream voice signals; and
 - a second receiver circuit for extracting upstream data signals from the subscriber line, wherein the second receiver circuit substantially eliminates any signals outside of a second frequency range associated with data communications to provide the upstream data signals, wherein the first and second receiver circuits reside on a same integrated circuit die, *wherein the integrated circuit provides a common upstream path for receiving any upstream voice and data signals from the subscriber line.*

(Claim 11)(*emphasis added*)

Thus applicant submits claims 1 and 11 are not anticipated by Pessl. Given that claims 2-10 depend from claim 1 and claims 12-25 depend from claim 11, applicant submits claims 2-10 and 12-25 are likewise not anticipated by Pessl.

Applicant respectfully submits that the 35 U.S.C. § 102 rejections have been overcome.

Response to 35 U.S.C. § 103 Rejections

Claims 12-25 were rejected as being unpatentable over Pessl as applied to claim 11 in the 35 U.S.C. § 102 rejection and further in view of Hjartarson. Applicant submits claims 12-25 are patentable over the cited references.

As noted above, claim 11 is not anticipated by Pessl. Hjartarson does not resolve the deficiencies of Pessl argued above with respect to claim 11. Thus claim 11 is patentable over Pessl and Hjartarson under 35 U.S.C. § 103. Given that claims 12-25 depend from claim 11, applicant submits claims 12-25 are likewise patentable over the cited references.

Applicant respectfully submits that the 35 U.S.C. § 103 rejections have been overcome.

Conclusion

In view of the arguments presented above, applicant respectfully submits the applicable rejections and objections have been overcome. Accordingly, claims 1-25 should be found to be in condition for allowance.

If there are any issues that can be resolved by telephone conference, the Examiner is respectfully requested to contact the undersigned at (512) 858-9910.

Respectfully submitted,

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